Approved by the Market Risk Advisory Committee for CFTC Consideration
February 23, 2021

RECOMMENDATIONS REGARDING CCP MARGIN METHODOLOGIES

Report of the Central Counterparty (CCP) Risk and Governance Subcommittee, Market Risk Advisory Committee of the U.S. Commodity Futures Trading Commission

Acting Chairman Rostin Behnam, Sponsor

Lee Betsill & Alicia Crighton, Co-Chairmen

This report was approved on February 12, 2021 by the CCP Risk and Governance Subcommittee of the Market Risk Advisory Committee (MRAC). The views, analyses, and conclusions expressed herein reflect the work of the CCP Risk and Governance Subcommittee of the MRAC, and do not necessarily reflect the views of the MRAC, the Commodity Futures Trading Commission or its staff, or the U.S. government. Reference to any products, services, websites, organizations, or enterprises, or the use of any, organization, trade, firm, or corporation name is for informational purposes only and does not constitute endorsement, recommendation, or favoring by the U.S. Government.

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CCP Risk and Governance Management Subcommittee of the Market Risk Advisory Committee of the CFTC

Recommendations regarding CCP Margin Methodologies

The Market Risk Advisory Committee ("MRAC") advises the Commodity Futures Trading Commission ("CFTC") on matters relating to evolving market structures and movement of risk across clearinghouses, exchanges, intermediaries, market makers and end-users. The MRAC established the CCP Risk and Governance Subcommittee ("Subcommittee") to provide reports and recommendations directly to the MRAC regarding current issues impacting clearinghouse risk management and governance. The Recommendations regarding CCP Margin Methodologies reflects the collective work of the Subcommittee in putting forth recommendations to the CFTC related to CCP margin methodologies.[1] This paper sets forth recommendations across six key elements of a robust margin framework, many of which CCPs are following today. Where recommendations could not be agreed on by a majority of the Subcommittee, a summary of the discussion on additional areas for consideration is also noted below.

I. Anti-procyclicality

Within the international risk management standards for financial market infrastructures, CPMI-IOSCO defined procyclicality as the "changes in risk-management requirements or practices that are positively correlated with business or credit cycle fluctuations and that may cause or exacerbate financial instability."[2] Considering this definition and the impact that margin requirements may have on overall financial stability, CCPs need to be able to manage the procyclical nature inherent in all the markets they serve.

CPMI-IOSCO provided further guidance on how CCPs should measure and address procyclicality in its margin methodology, including by using quantitative metrics to assess procyclicality and developing "appropriate methods or tools for mitigating the potential for destabilizing, procyclical changes arising from its margin system."[3] Prescriptive requirements for European-based CCPs to address procyclicality were adopted with the promulgation of Article 41 of EMIR and Article 28 of the RTS, which set out requirements for CCPs to monitor procyclicality and adopt at least one of three anti-procyclicality margin measures.[4] In contrast, the CFTC takes a more principle-based approach to addressing procyclical risk pursuant to CFTC Regulation 39.13.

[1] Certain of the recommendations reflected in this document may not be applicable to all CCPs given differences in instruments cleared, business models or CCP rules and regulatory requirements.

[2] Committee on Payment and Settlement Systems (later renamed the Committee on Payments and Market Infrastructures, or CPMI) and Technical Committee of the International Organization of Securities Commissions (IOSCO), *Principles for Financial Market Infrastructures* [hereafter *PFMI*] (April 2012).

[3] Committee on Payments and Market Infrastructures and Board of the International Organization of Securities Commissions, *Resilience and Recovery of Central Counterparties (CCPs): Further Guidance of the PFMI* [hereafter *Further guidance of the PFMI*] (July 2017).

[4] The three measures prescribed in Article 28 of the RTS are for CCPs to apply a margin buffer at least equal to 25% of the calculated margins which it allows to be temporarily exhausted in periods, where calculated margin requirements are rising significantly; assign at least 25% weight to stressed observations in the lookback period calculated in accordance with Article 26 of the RTS; or ensure that its margin requirements are not lower than those that would be calculated using volatility estimated over a 10-year historical lookback period.

Managing procyclicality is a fundamental aspect of a CCP's holistic risk management framework, and the Subcommittee is supportive of efforts by international standard setters, regulators, and CCPs to address procyclicality within margin methodologies. The Subcommittee believes that an effective approach to managing procyclicality must be tailored to the unique products and markets that different CCPs clear. CCPs must maintain the ability to apply expert judgement with appropriate governance in response to market volatility to balance procyclical changes to initial margin requirements with prudent risk management and broader financial stability. As a general principle, CCPs should seek to limit the reactivity of margins to volatility changes, which may exacerbate liquidity stress, and balance that with overall margin coverage levels.

To achieve these ends, the Subcommittee overall recommends that policymakers adopt an outcomes-based approach to anti-procyclical margin standards and ensure that future guidance is not prescriptive to the extent that it restricts a CCP's ability to appropriately manage risk, especially in times of high volatility or market stress. FCM, Buy-side, One CCP and Independent Voting Members of the MRAC Subcommittee thought more prescriptive procyclicality measures should be included in this report similar to those detailed in the October 2020 FIA Paper[5] such as stress lookback periods be long enough to include periods of significant market stress, minimum volatility floors be implemented and appropriately calibrated for the contract and asset class and margin amounts be calculated based on analysis of absolute and percentage returns. Procyclicality was also addressed in the January 2021 ISDA paper.[6]

Recommendation #1:
The CFTC should enhance its flexible approach to supervising how CCPs manage procyclical margin requirements that prioritizes the desired outcome of reducing procyclicality, not the specific means of reducing it. Supervisory expectations should recognize that CCPs may employ a range of tools to measure and manage procyclicality that are uniquely tailored to the products and markets it clears.

Other tools may include, but are not limited to:

- A standard set of metrics to measure procyclicality that are suitable to the specific CCP to enable the CCP to determine targets to be achieved

- Portfolio-level margin floors based on longer-term volatility or other metrics

- Product level margin floors for significant products; Those could be calibrated including a defined period of stress (worst-of, or weighted), considering either relative or absolute price changes or both; Product-level margin floors applied to significant outright margins along with similarly significant inter-commodity spreads and select intra-commodity spreads, such as those for commodity-based products that have seasonality considerations

- Seasonality measures for products that demonstrate significant changes in price and volatility during certain times of the year, especially where seasonal factors outweigh historical volatility over a longer time horizon

[5] FIA's October, 2020 paper: Revisiting Procyclicality: The Impact of the COVID Crisis on CCP Margin Requirements
[6] ISDA's January, 2021 paper : COVID-19 and CCP Risk Management Frameworks

- The usage of extended lookback periods, the inclusion of stressed periods of risk, margin buffers, limits on the speed of margin increases relative to volatility increase, or input of stress conditions into margin requirements

Importantly, the tools and overall framework adopted by CCPs to limit procyclicality should be transparent to market participants. FCM, Buy-side, One CCP and Independent Voting Members of the MRAC Subcommittee believe that such transparency can be achieved through enhanced CCP PFMI quantitative and qualitative disclosures which could also be improved by the inclusion of product level breach disclosures for significant products.

II. Concentration and Liquidity Add-ons

In accordance with CFTC requirements, derivatives clearing organizations ("DCOs") must have "initial margin requirements that are commensurate with the risks of each product and portfolio, including any unusual characteristics of, or risks associated with, particular products or portfolios."[7] The use of margin add-ons, including those that address the impact of concentration and liquidity on the expected closeout costs of a portfolio, allows CCPs to address risks in the market that are unique to certain products or portfolios they clear.

CPMI-IOSCO provided further guidance that "add-on charges can address risks that may be more challenging to model accurately, or are not readily discernible in the price histories of the products cleared."[8] The Subcommittee agrees with this statement and believes that a CCP should have the ability to exercise its expert judgment to apply concentration and liquidity add-ons in its margin methodology in a flexible manner to address risks that are not easily modeled. Applying too granular of a standard to the way that margin add-ons are utilized by CCPs may undermine their ability to address these sorts of risks and in turn increase overall systemic risk in the markets.

Recommendation #2:
CCPs should be allowed flexibility to apply margin add-ons that consider the impact of liquidity and portfolio concentration on expected closeout costs. The application of liquidity and concentration add-ons by CCPs should be based on market depth[9] and position exposures and may consider the following factors:

- Clearing member polls or other modeling techniques of bid/offer prices should be used to capture possible liquidity add-ons

- CCPs should consider volume, open interest, order book data, or other similar metrics to capture concentrated position exposures at a product or portfolio-level for possible margin add-ons

- CCPs should consider position concentration relative to product liquidity and the impact of differences in bid/offer prices of closing out a portfolio in determining the amount of

[7] CFTC 17 CFR § 39.13 (g)(2)(i)
[8] See *Further guidance of the PFMI* at ¶ 5.2.12
[9] For new product launches, market depth assumptions made at launch can be reassessed over time and as trading patterns emerge or change.

concentration add-on to apply. For less liquid products, or those where fewer participants are active, this may require explicit modelling of liquidation costs

- The impact of position size on close-out costs, i.e., concentration risk, should be captured at a product or product group level based on the cost of closing out positions or through an analysis of product or product group volume

- Liquidity and concentration add-ons should be transparent, easily replicable, and where possible, also applied at the customer origin

- Any further liquidity or concentration add-ons or limits applied by clearing members to their customers should also consider similar principles as those outlined above

- **Note**: FCM, Buy-side, Independent Voting Members of the MRAC Subcommittee thought additional add-ons should be considered as part of this report, including jump-to-default, wrong-way risk, sovereign, holidays, and whether the underlying asset is subject to default such as equity and corporate bond cash and derivative instruments.

III. Intraday and Ad-Hoc Margin Calls

CCPs are exposed to the accumulation of current exposures from intraday changes to market prices and the positions of their participants. To mitigate this risk, the PFMI state that CCPs "should have the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants."[10] CPMI-IOSCO provided further guidance that "a CCP should identify, establish and implement clear triggers and thresholds to recalculate margin requirements on an intraday basis."[11]

In the context of intraday exposures, it is critical to distinguish between the collection of initial versus variation margin intraday and the use of scheduled/predictable event-driven versus unpredictable, ad-hoc intraday margin calls. The Subcommittee supports the scheduled/predictable event-driven and routine collection of intraday variation and initial margin triggered by price changes or position changes to prevent uncollateralized current exposures from building up at a CCP. Unpredictable, ad-hoc intraday settlement cycles during which the CCP collects variation or, where practicable, initial margin triggered by margin parameter changes, should only be executed in extreme and exigent circumstances and in a manner that considers the prevailing market conditions.

Recommendation #3:
The CFTC should promote the use of scheduled/predictable event-driven and routine intraday variation settlement cycles to prevent the accumulation of current exposures at CCPs as appropriate. In addition, CCPs should be allowed the discretion to manage intraday exposures with unscheduled/not predictable event-driven intraday margin calls under the following conditions:

[10] See Principle 6, Key Consideration 4 of the *PFMI*
[8] See *Further guidance of the PFMI* at ¶ 5.2.23

- CCPs should clearly distinguish the amount of an intraday margin call that is used to manage current (variation margin) versus potential future (initial margin) exposure

- Margin frameworks should maintain that unpredictable ad-hoc intraday variation and initial margin calls would only be required in times of extreme market dislocation

- When intraday variation margin is collected by a CCP, the corresponding gains should also be paid out to clearing members or netted off against any other margin owed to the CCP on the same day, as feasible

- Intraday initial and variation margin calls should be met within one hour or as soon as practicable given CCP and Clearing Member infrastructures

- CCPs should provide full transparency for triggers of intraday margin calls. This will assist clearing participants in actively tracking and monitoring liquidity demands

- An ad-hoc intraday or emergency call should only be charged to members of the relevant clearing service in which the margin call is being triggered

- CCPs should proactively engage with clearing members ahead of applying any unpredictable, ad-hoc margin add-ons or issuing unpredictable, ad-hoc margin calls due to market conditions or the credit profile of the clearing member. This will smooth out the potential liquidity risk for clearing members and provide transparency for the adjustments

IV. Margin Period of Risk

The expected closeout period for a given product, i.e., the margin period of risk ("MPOR"), is a critical assumption that a CCP must make in developing its margin methodology. As noted by CPMI-IOSCO, this assumption may vary among products and markets and should be based on a number of factors, including a product's liquidity, price, how it's commonly traded, and the overall depth of the market.[12]

While the CFTC has prescribed a minimum MPOR for various products that a DCO must use,[13] a CCP ultimately must use its expert judgement to determine an appropriate MPOR based on the unique characteristics of the markets and products for which it clears. Such characteristics should include the account structure, market structure, and liquidity of the product, each of which will impact how a CCP would manage the potential default of a clearing member portfolio. The Subcommittee agrees with CPMI-IOSCO and the CFTC in that the MPOR should be based on the estimated time between when the CCP will have collected the last margin payment and the point at which the defaulter's portfolio will be effectively hedged or liquidated.[14] [15]

Recommendation #4:
When evaluating the appropriateness of a CCP's MPOR assumption, the CFTC should consider the following principles:

[12] See *Further guidance of the PFMI* at ¶ 5.2.4
[13] CFTC 17 CFR § 39.13 (g)(2)(ii)
[14] See *Further guidance of the PFMI* at ¶ 5.2.6
[15] CFTC 17 CFR § 39.13 (g)(2)(ii)

- The MPOR should be commensurate with the CCP's default management framework. The MPOR should be aligned with the time needed to hedge the delta, port client positions to a new clearing member, or otherwise liquidate and/or auction the portfolio to return the CCP to a matched book, as appropriate to the account type

- CCPs should disclose their general framework for making MPOR decisions and demonstrate to market participants that the CCP's overall MPOR is appropriate given the CCP's default management capabilities, which may include documentation and rationalization to support their choices

- The MPOR should consider longer timer periods for less liquid products,[16] which could be based on volume, orders, polling data, or open interest data analysis to determine overall liquidity

- MPOR should be based on the liquidity attributes of the product, irrespective of how it is traded (i.e., OTC or on exchange)

- **Note**: FCM, Buy-side, One CCP and Independent Voting Members the MRAC Subcommittee believe that minimum MPOR should be set at two days to align with the time needed to hedge, port, or liquidate a defaulted portfolio while other CCP members believe that it is more important to collect customer margin on a gross basis rather than focusing on a minimum MPOR

V. Pricing

Reliable pricing data is an important input into how CCPs accurately and effectively measure credit exposure. In accordance with CFTC requirements, DCOs are required to have a reliable source of pricing data and "written procedures and sound valuation models for addressing circumstances where pricing data is not readily available or reliable."[17] While CCPs can rely on the transparent pricing from the deep, liquid exchange-traded markets that utilize central limit order books, OTC cleared products are generally less standardized and provide less price transparency. As noted in the PFMI, for some cleared markets, prices may not be reliable for various reasons, including the lack of a continuous liquid market or volatile bid-ask spreads.[18] In scenarios where CCPs cannot obtain updated prices because of a lack of trading or orders placed in the market, CCPs must have a robust framework that can effectively update prices to avoid utilizing stale prices within its margin methodology.

Recommendation #5:
CCPs should have a robust framework for determining end of day settlement prices and theoretical intraday pricing. A robust pricing framework should incorporate the following principles:

- Broker quotes and/or bids/offers should be considered in a CCP's pricing framework to better reflect current market conditions for less liquid products

[16] As with concentration charges, MPOR decisions linked to market depth assumptions made at launch for new products can be reassessed over time and as trading patterns emerge or change.
[17] CFTC 17 CFR § 39.13 (g)(5)
[18] See *PFMI* at ¶ 3.6.5

- The pricing of instruments that are less liquid could be modeled from comparable instruments with more liquidity. This could be achieved with, for example:
    - Back-month derivative products based off front-month products with an appropriate spread charge
    - Stocks that are a constituent of an index may use the movement of the index value
    - Modeling the implied volatility surface to interpolate and extrapolate volatilities across the curve

- CCPs should consider a modeled price if no market information is available

- CCPs should consider modeling underlying cash flows of an instrument to determine settlements

- CCPs should consider incorporating an incentive mechanism, as necessary and appropriate, for clearing members to submit quotes to determine pricing for OTC products

VI. Transparency

MRAC Subcommittee on CCP Risk and Governance plans to issue a position paper with recommendations related to transparency and disclosures at a future date but determined that margin transparency was an important enough topic that it was deserving of the high-level recommendation below.

Recommendation #6:
CCP margin methodologies should be sufficiently transparent to market participants so they can understand how models react to certain market conditions for liquidity planning and risk management purposes.

Members of the MRAC Central Counterparty Risk and Governance Subcommittee

	Name	Entity Representing	Title
1.	Lee Betsill (Co-Chair)	CME Group	Managing Director and Chief Risk Officer
2.	Alicia Crighton (Co-Chair)	Futures Industry Association	Global Co-Head of Futures and Head of OTC and Prime Clearing Businesses, Goldman Sachs
3.	Richard Berner		Clinical Professor of Management Practice in Finance and Co-Director of the Stern Volatility and Risk Institute, NYU Stern School of Business
4.	Peter Borish	Quad Group	Chief Strategist
5.	Chris Dickens	HSBC	Managing Director, Chief Operating Officer, Global Markets, EMEA
6.	Matthias Graulich	Eurex Clearing AG	Member of the Executive Board and Chief Strategy Officer
7.	Graham Harper	Futures Industry Association – Principal Traders Group	Head of Public Policy and Market Structure at DRW
8.	Lindsay Hopkins	Minneapolis Grain Exchange	Clearing House Counsel
9.	Demetri Karousos	Nodal Exchange, LLC	Chief Risk Officer, Nodal Clear, LLC, and Managing Director, Market Administration and Surveillance, Nodal Exchange, LLC
10.	Eileen Kiely	BlackRock	Managing Director, Deputy Head of Counterparty Risk
11.	Kevin McClear	Intercontinental Exchange, Inc.	Corporate Risk Officer
12.	Dennis McLaughlin	LCH Group	Group Chief Risk Officer
13.	Dale Michaels	The Options Clearing Corporation	Executive Vice President, Financial Risk Management
14.	John Murphy	Commodity Markets Council	Managing Director and Global Head of the Futures Division, Mizuho Americas
15.	Marnie Rosenberg	JP Morgan	Managing Director and Global Head of Clearinghouse Risk & Strategy
16.	Dr. Marcus Stanley	Americans for Financial Reform	Policy Director
17.	Robert Steigerwald*	Federal Reserve Bank of Chicago	Senior Policy Advisor, Financial Markets
18.	William Thum	Vanguard	Principal and Global Head of Capital Markets Legal and Regulatory
19.	Nadia Zakir**	Pacific Investment Management Company LLC (PIMCO)	Executive Vice President and Deputy General Counsel

*-Mr. Steigerwald, in representing the Federal Reserve Bank of Chicago, is a non-voting member. In this capacity, he did not provide advice and recommendations on this report

**-denotes MRAC Chair

CONCURRING STATEMENTS

February 12, 2021

BlackRock Statement on CFTC MRAC CCP Risk and Governance Subcommittee Papers

BlackRock commends Acting Chair Behnam for establishing the CFTC's CCP Risk & Governance Subcommittee to provide reports and recommendations regarding issues impacting clearinghouse risk management and governance. BlackRock believes that stable and secure financial markets are paramount to the protection of end-users' investment activity and as such, we support the recommendations made in the Subcommittee's papers as they would serve to enhance CCP risk management and governance.

The papers contain specific recommendations on CCP Margin Methodologies and CCP Risk Governance, many of which are also highlighted in A Path Forward for CCP Resilience, Recovery, and Resolution, a paper that BlackRock co-authored with a group of a buy-side and sell-side firms, released in 2019.[1] The paper proposed twenty recommendations to enhance CCPs' resilience, recovery and resolution.

The Subcommittee papers represent an important part of a broader endeavor to enhance financial stability that is supported by CCPs, clearing members and end-users alike, and BlackRock encourages the CFTC and other relevant regulatory authorities to pursue rulemaking to implement these recommendations. While there were some areas of disagreement between CCPs and the clearing members and end-users, we believe the work presented by the Subcommittee as a meaningful first step and look forward to working through the Subcommittee in the months to come to address other key issues, such as transparency, disclosure, capital and stress testing.

Recommendations Regarding CCP Margin Methodologies

We support the recommendations on margin methodologies as we feel they will provide the CFTC with guidance on the market's expectations for how the CFTC's principles-based approach on CCPs' margin should be interpreted. We encourage the CFTC staff to apply this guidance when considering the adequacy of a particular margin practice.

Recommendations Regarding CCP Risk Governance

BlackRock supports the governance recommendations presented by the Subcommittee, as they would require CCPs to establish appropriate information channels with end-user participation that would allow the exchange of risk-based market views (to the extent a CCP does not already have such a channel).

[1] The paper was originally published in October 2019 and was re-released in March 2020 with nineteen signatories.

JPMorgan Chase Statement on CFTC MRAC CCP Risk and Governance Subcommittee Papers

JPMorgan commends Acting Chair Behnam for establishing the CFTC's CCP Risk & Governance Subcommittee (Subcommittee) last year and supporting the development of actionable recommendations to enhance CCP risk management and governance. The two papers prepared by the Subcommittee, with specific recommendations on CCP Margin Methodologies and CCP Risk Governance, are an important step forward. Notably, they seek to address several of the issues highlighted in A Path Forward for CCP Resilience, Recovery, and Resolution, a white paper that JPMorgan, together with a group of a buy-side and sell-side firms, released in 2019.[1] This white paper proposes twenty recommendations to enhance CCPs' resilience recovery and resolution, for consideration by relevant policymakers and regulators.

Overall, we support the recommendations in the Subcommittee's papers and encourage the CFTC and other relevant regulatory authorities to pursue rulemaking to implement them. We also endorse ongoing work by the Subcommittee, with support from Acting Chair Behnam, to continue the development of recommendations pertaining to issues of CCP transparency and disclosures, CCP capital, and CCP stress testing which were also raised in the 2019 industry white paper on CCP resilience, recovery and resolution referenced above.

Recommendations Regarding CCP Margin Methodologies

We support the six recommendations on margin methodologies which are intended to ensure that CCPs' margin models are robust, including those which require margin frameworks to address procyclicality, include concentration and liquidity add-ons, and align the margin period of risk with the liquidity of products. We also support the overarching requirement for greater transparency around margin models to enhance their predictability and support market participants' liquidity planning and risk management. While these recommendations represent a good starting point on these issues, we would welcome further examination on the topics of margin procyclicality, margin add-ons, and related disclosures by regulators. As stated in the paper itself, Subcommittee members representing FCMs, buy-side firms and one CCP along with the independent voting members thought procyclicality measures similar to those detailed in FIA's October, 2020 paper, Revisiting Procyclicality: The Impact of the COVID Crisis on CCP Margin Requirements should be included as recommendations along with expansion of CCP public disclosure requirements to include product level breach disclosures for significant products and setting the minimum margin period of risk assumption at two days to align with the time needed to hedge, port, or liquidate a defaulted portfolio.

Recommendations Regarding CCP Risk Governance

We support the recommendation to require CCPs to solicit, consider, and address market participants' views in the early stages of proposing changes that could materially affect a CCP's risk profile, for example through risk advisory working groups comprised of clearing members and end-users. Similarly, we support the recommendation to codify best practices related to CCPs' risk management committees. However, we would like to highlight that the independent voting member, clearing member and end-user perspective that CCPs should be required to formally consult with market participants before filing any rule submission with the CFTC that could materially affect the risk profile of the CCP's activity was not agreed upon by the full Subcommittee. We hope that this perspective can be revisited in future forums.

[1] The paper was originally published in October 2019 and now has twenty signatories.

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February 12, 2021

Submitted electronically

Alicia Lewis
CFTC MRAC Designated Federal Officer
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, DC 20581

Re: ***CFTC MRAC CCP Risk and Governance Subcommittee: Vanguard Statement with respect to recommendations related to CCP Governance and CCP Margin Methodologies***

Dear Ms. Lewis:

Vanguard[1] appreciates the opportunity to serve on the Central Counterparty ("**CCP**") Risk and Governance Subcommittee (the "**Subcommittee**") of the Commodity Futures Trading Commission's ("**CFTC**") Market Risk Advisory Committee ("**MRAC**"). We commend Acting Chair Rostin Behnam for establishing the Subcommittee to develop actionable recommendations to address CCP risk issues.[2]

In multiple forums in recent years, Vanguard has consistently called on global regulators to address risks related to CCPs. In 2019, Vanguard joined with a group of concerned asset managers and futures commission merchants ("**FCMs**"), to publish "**A Path Forward for CCP Resilience, Recovery, and Resolution**" which sets forth twenty recommendations to improve CCP incentives, transparency and governance.

While our support for clearing is resolute, we see compelling opportunities to enhance the resiliency of CCPs, and to better prepare for their recovery and resolution. Especially as non-defaulting market participants are required to backstop CCP failures, it is imperative for market participants to have an effective voice in CCP governance and a clear window into CCP risks. The global ruleset must also be enhanced to strengthen the incentives for CCPs to offer products they can effectively risk manage, as the downside of a CCP's risk management failure is presently disproportionately borne by non-defaulting market participants, including, potentially, our mutual funds.

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[1] Vanguard is a global asset manager that offers more than 420 funds with aggregate assets of approximately $7 trillion. Our core purpose is to take a stand for all investors, treat them fairly, and give them the best chance for investment success

[2] As a part of prudent management, Vanguard funds enter into derivatives contracts, including swaps and futures, to achieve a number of benefits for our investors, including hedging portfolio risk, lowering transaction costs, managing cash, and achieving more favorable execution compared with traditional investments. Vanguard has been fully supportive of global derivatives regulatory reform to bring much-needed transparency and regulation to the derivatives markets.

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Vanguard supports the recommendations in the papers addressing CCP Governance and CCP Margin Methodologies presented for consideration by the MRAC as being directionally appropriate improvements to existing practices in these areas. The progress to be achieved from the implementation of the recommendations should be further expanded through committed efforts on matters highlighted in the papers which did not receive full Subcommittee support. For example, margin anti-procyclicality measures noted in the paper should be further considered to mitigate risks so clearly demonstrated in 2020. Likewise, additional work is required to advance the discussions aimed at ensuring that market participants have notice of, and the opportunity to comment on, matters that materially impact the risk profile of a CCP.

We also recommend that the work of the Subcommittee continue to develop actionable recommendations in the areas of CCP transparency, incentives, stress testing and liquidity, and default management. Vanguard is committed to productively engage in this meaningful effort to enhance the overall foundational resiliency of CCPs and thereby mitigate the potential systemic risk presented by this now critical market infrastructure.

* * * * *

We appreciate the opportunity to serve on the CFTC's MRAC Subcommittee on CCP Risk and Governance. If you have any questions about Vanguard's comments or would like any additional information, please contact William C. Thum, Principal, at (610) 669-9823 or william_thum@vanguard.com.

Sincerely,

DocuSigned by:

E13124A00F5A49D...

/s/ William C. Thum, Principal
Global Head of Capital Markets Legal and Regulatory Practice Group
Vanguard